PCV38

ECONOMIC EVALUATION OF ANTICOAGULANT STRATEGIES IN INTERVENTIONAL TREATMENT OF ACUTE MYOCARDIAL INFARCTION

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OBJECTIVES: The choice of anticoagulant strategy in PCI affects the costs of treatment for patients with AMI. Given the economic constraints of a fixed per-case payment based on DRGs in Germany, anticoagulant strategy must not only offer medical benefits for the patient but also be economically acceptable for hospitals. Therefore the in-hospital costs of using different anticoagulants in a real-world setting are highly relevant from a hospital perspective. Based on administrative hospital data the purpose of this study was to determine the economic impact of routinely used anticoagulant strategies in patients undergoing percutaneous coronary intervention (PCI) for acute myocardial infarction (AMI) in Germany. **METHODS:** We analyzed in a real-world scenario administrative routine data from 1409 patients undergoing PCI for AMI in two high-volume german PCI centers. In-hospital costs of contemporary antithrombotic strategies, in detail 1) unfractionated heparin (UFH) monotherapy (n=953); 2) UFH + glycoprotein IIb/IIIa receptor inhibitor (GPI; n=337); or 3) bivalirudin (n=119) were calculated based on the observed resource utilization. **RESULTS:** Baseline characteristics were well balanced and clinical outcomes were similar for all groups though not powered for difference. Total length of stay (LOS) and time spent in ICU was lowest with bivalirudin. Therefore in-hospital costs were lowest with bivalirudin (UFH: 3807,2€ ± 2235,98€; UFH+GPI: 4643,15± 4662,48€; bivalirudin: 3461,82€ ± 1301,96€). **CONCLUSIONS:** Compared with UFH monotherapy and UFH + GPI, the use of bivalirudin among patients undergoing PCI for AMI in Germany results in a shorter ICU and total LOS and appears to reduce in-hospital costs.

PCV39

COST ASSESSMENT OF DRUGS FOR VENOUS THROMBOEMBOLISM PREVENTION AFTER HIP OR KNEE REPLACEMENT IN MEXICAN POPULATION

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OBJECTIVES: Identify treatment patterns and cost for the prophylaxis of venous thromboembolism (VTEp) in patients undergoing total hip o knee replacement (THR oTKR) from the public payer perspective in Mexico. In addition, this study assesses VTE incidence rate and adverse events commonly with prophylaxis treatment. **METHODS:** A retrospective cohort in four public hospitals was conducted, recruiting 650 patients undergoing THR or TKR from September 2011 to February 2012. Through medical records review, demographic, clinical and resource utilization data was gathered over hospitalization period and ambulatory monitoring follow-up for 3 months. Patients were categorized according to VTEp treatment, incidence of VTE (deep vein thrombosis (DVP) and pulmonary embolism (PE)), and associated adverse events (major or minor bleeds). Direct medical cost (lenght of hospital stay, and ambulatory care) associated with each therapy were calculated and expressed in US dollars (USD) at exchange rate of 13.72 Mexican pesos/USD (June 2012). Statistical differences were identified by Kuskal-Wallis test. **RESULTS:** A total of 650 patiens were included, with an average age of 66 +/− 11 years, 55% men. With TKR 57% and THR 43%, were 66.5 had one co-morbidity, being the most frequent systemic hypertension (51%). VTEp was given to 95.3% of patients. The prescribed drugs were: enoxoparin (86%), nadroparin (6.4%), unfractionated heparin (0.8%), rivaroxaban (6.3%), dabigatran (0.5%). DVP incidence resulted in 0.3%, major bleeds in 0.2%, and minor bleeds in 0.6%. Mean direct medical costs for each agent were: enoxoparin 4.450 USD (2.458-14.733); nadroparin 3.016 USD (2.792-3.639); unfractionated heparin 4.603 USD (3.675-5.312); rivaroxaban 4.427 USD (3.626-6.885); dabigatran 4.347 USD (4.166-4.468); and without VTEp 5.077 USD (2.801-13.235) ($p<0.05$). **CONCLUSIONS:** VTEp therapies are common and safe in mexican patients. Incidence of VTE is low, while higher costs were observed in patients with non-prophylaxis treatment.

PCV40

PHARMACOTHERAPY COST OF PATIENTS WITH HYPERTENSION IN BULGARIA

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OBJECTIVES: To study the medicinal treatment of hypertension and its impact on the cost of therapy. The study is developed from the point of view of the health insurance institution and patients. **METHODS:** Prospective observational study of prescribing patterns and cost of pharmacotherapy. Patients' demographics, clinical data (blood pressure range), pharmacotherapy costs of hypertension were collected and proceeded. **RESULTS:** A total of 5000 patients participated in the study. Preliminary results for the first 1000 patients are presented. The average age was 64 years (57% female); 88% were living in the cities, and 72% were hypertonic since 1 to 5 years. On total 47 medicines' INN were prescribed in all prescriptions. Most frequently ACE inhibitors were found prescribed in 421 of all prescriptions, followed by diuretics in 378 prescriptions. 7 INN of antihypertensive medicines were prescribed in 47% of prescrptions. The adequate control of blood pressure was reached only from 40% of observed patients, but 60% declare satisfaction of their pharmacotherapy in contradiction with the insufficient control. The total cost of the pharmacotherapy of 1000 patients for one month was 10679.53 €, and out of them 2698.42 € have been reimbursed. Thus the average monthly cost per patient was found to be 10.67 €. On mono therapy were 23% of the patients, 41% on dual therapy, and 36 % on politherapy. Their respective monthly cost per patient was – 1.25 € (23% reimbursed) for monotherapy, 8.7 € (25% reimbursed) for dual therapy, 15.8 € (26% reimbursed) for polytherapy. **CONCLUSIONS:** The cost per patients is relative lower but the main burden is carried out by the patients. With the increase in the complexity of pharmacotherapy the cost per patients logically increases but reimbursement level remains almost unchanged.

PCV41

MODEL SENSITIVITY ANALYSIS OF VENOUS THROMBOEMBOLISM PREVENTION AFTER TOTAL KNEE REPLACEMENT

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OBJECTIVES: Cost-effectiveness analysis performed in 2010 showed that the use of rivaroxaban for the prevention of deep vein thrombosis (DVT) and pulmonary embolism (PE) after total knee replacement (TKR) is dominant technology (Vorobiev P. et al. Value in Health, 2011). Objective of this study was to evaluate the cost-effectiveness of rivaroxaban compared to dabigatran and enoxaparin for the prophylaxis of venous thromboembolism in patients after TKR taking into account the recent drug price changes. **METHODS:** Cost-effectiveness analysis of rivaroxaban versus dabigatran and enoxaparin to prevent venous thromboembolism after TKR was done in 2010. A decision-tree model of different regimens for thromboprophylaxis after THR was adopted from the model, developed by McCullagh et al. (2009). Total costs and incremental cost-effectiveness ratios (ICERs) were calculated. In 2012 the price of rivaroxaban and dabigatran reduced by 63.8% and 34.6% respectively, while the price of enoxaparin increased by 6.8%. **RESULTS:** The total cost of rivaroxaban prophylaxis was 4678 €, enoxaparin – 4946 €, dabigatran – 4980 €. To prevent one event of DVT with rivaroxaban the ICER is lower by 2553 € than dabigatran and by 2593 € than enoxaparin. To prevent one event of PE with rivaroxaban the ICER is lower by 268 € than dabigatran and by 307 € than enoxaparin. **CONCLUSIONS:** Sensitivity analysis using new prices confirmed that the use of rivaroxaban for prevention of venous thromboembolism after TKR remains the dominant technology compared to dabigatran and enpxaparin.

PCV42

MODEL SENSITIVITY ANALYSIS OF VENOUS THROMBOEMBOLISM PREVENTION AFTER TOTAL HIP REPLACEMENT

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OBJECTIVES: Despite of higher cost of deep vein thrombosis (DVT) and pulmonary embolism (PE) prophylaxis after total hip replacement (THR) with rivaroxaban compared to enoxaparin and dabigatran, it was more effective than two other alternatives with acceptable incremental cost-effectiveness ratios (ICERs) (Vorobiev P. et al. Value in Health, 2011). Objective of this study was to evaluate the cost-effectiveness of rivaroxaban compared to dabigatran and enoxaparin for the prophylaxis of venous thromboembolism in patients undergoing elective THR, taking into account the drug price changes. **METHODS:** Cost-effectiveness analysis of rivaroxaban versus dabigatran and enoxaparin to prevent venous thromboembolism after THR was carried out in 2010. A decision-tree model of the choice of thromboprophylaxis regimens was adopted from the model developed by McCullagh et al. (2009). Total costs and ICERs were calculated. In 2012 the price of rivaroxaban and dabigatran decreased by 63.8% and 34.6% respectively, while the price of enoxaparin increased by 6.8% (IMS). **RESULTS:** Total costs for the prevention of venous thromboembolism after THR were as follow: rivaroxaban – 6102 € (5221 € in 2010); dabigatran – 6155 € (5156 € in 2010); enoxaparin – 6154 € (5094 € in 2010). To prevent one event of DVT with rivaroxaban the ICER is lower by 244 € than dabigatran and by 502 € than enoxaparin. To prevent one event of PE with rivaroxaban the ICER is lower by 72 € than dabigatran and by 77 € than enoxaparin. **CONCLUSIONS:** Sensitivity analysis demonstrated that the use of rivaroxaban for the prevention of venous thromboembolism after THR compared to dabigatran and enoxaparin is the dominant technology.

PCV43

FAIR COST-BENEFIT EVALUATION OF HEALTH CARE: A CASE STUDY OF BLOOD PRESSURE LOWERING DRUGS IN FRANCE

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OBJECTIVES: Whether it is possible to ground health technology assessment on egalitarian social justice theory is an ongoing debate. This study aims to contribute to answer this question as it is focussed on concrete application of equivalent income approach that has been developed by M. Fleurbaey (2007) and aiming to include inequality aversion in cost/benefit analysis. The objective is to prove its feasibility in the context of public decision making. For this first application case, it has been chosen to focus on the economic assessment of antihypertensive treatments for patients with essential hypertension. **METHODS:** The method is based on the comparison of two social welfare functions: social welfare function in terms of individuals' equivalent incomes when antihypertensive treatments are prescribed in primary prevention (SWA) and social welfare function in terms of individuals' equivalent incomes when there is no antihypertensive treatment in primary prevention (SWB) . If $SW_A - SW_B > 0$, then it would be considered that antihypertensive treatments in primary prevention are welfare improving com-